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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/998,225	12/03/2001	Fumirou Abe	826.1775	6631

21171 7590 05/12/2005

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EXAMINER

LU, KUEN S

ART UNIT	PAPER NUMBER
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2167

DATE MAILED: 05/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/998,225

Applicant(s)

ABE ET AL.

Examiner

Kuen S Lu

Art Unit

2167

– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 February 2005.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 23-46 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 23-46 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date #1-2/9/2005.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendments

1. The Action is responsive to the Applicant's Amendments, filed on February 9, 2005. The Examiner noted claims 1-22 cancelled, claims 23-24 currently amended and claims 25-46 amended new. Also noted is the searching condition set comprising a search-pattern and a search-formula where search-formula is a new subject matter introduced to each of the independent claims 25, 30, 40, 41 and 46. The Examiner has introduced a new, Hasegawa reference to provide a teaching for the subject matter, in the Office Action for Final Rejection (hereafter "the Action") as shown next.
2. As for the Applicant's Remarks on claim rejections, filed on February 9, 2005, has been fully considered by the Examiner, please see discussion in the section ***Response to Arguments***, following the Action.

Claim Objections

3. Claims 25, 30, 35, 41 and 46 are objected to because of the following informalities:

At claims 25, 30, 35, 41 and 46, the limitation "receiving, from a terminal apparatus, a search condition set that comprises a search-pattern and a search-formula and is used when searching through data constituting a search target, together with a terminal apparatus identifier that identifies the terminal apparatus associated with a search condition set" is interpreted as "receiving, from a terminal apparatus, a search condition set that comprises a search-pattern and a search-formula, is used when searching through data constituting a search target, together with a terminal apparatus identifier

that identifies the terminal apparatus associated with a search condition set" for clarification.

At claims 25, 30, 35, 41 and 46, the limitation "when investigating and determining that no preceding search-process is in progress and that two or more search-patterns are same as each other among those stored in the search-condition buffer" is interpreted as "when investigation determines that no preceding search-process is in progress and, two or more search-patterns are the same as each other among those stored in the search-condition buffer" for clarification".

At claim 40, the Examiner interpreted the terms "search pattern" and "search formula" the same as "search-pattern" and "search-formula", respectively.

For purpose of formality, appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 23-24 are rejected under 35 U.S.C. 102(e) as anticipated by Biderman et al. (U.S. Publication 2001/0037325, hereafter "Biderman").

As per claim 23, Biderman teaches the following:

"receiving plural character string text search requests including corresponding search variables from a plurality of terminal devices"(See Figs. 4a-4b and Page 5, [0053]-[0058] wherein Biderman's navigation string and search keywords are transmitted from the client machines and received by the servers is equivalent to Applicant's receiving plural character string text search requests including corresponding search variables from a plurality of terminal devices);

"combining the requests into a combined retrieval pattern including the search variables of the requests" (See Figs. 4a-4b and Page 5, [0053]-[0058] wherein Biderman's the navigation string and keywords are combined for the search and retrieval is equivalent to Applicant's combining the requests into a combined retrieval pattern including the search variables of the requests); and

"performing search using the combined retrieval pattern" (See Figs. 5-6 and Page 5, [0062] wherein Biderman's a search is performed based on the retrieved navigation strings and keywords is equivalent to Applicant's performing search using the combined retrieval pattern).

As per claim 24, Biderman teaches the following:

"receiving plural character string text search requests including corresponding search variables from a plurality of terminal devices" (See Figs. 4a-4b and Page 5, [0053]-[0058] wherein Biderman's navigation string and search keywords are transmitted from the client machines and received by the servers is equivalent to Applicant's receiving

plural character string text search requests including corresponding search variables from a plurality of terminal devices);

"storing the variables in a corresponding table with corresponding search request identifiers" (See Page 5, [0057]-[0058] wherein Biderman's client machine information is retrieved for returning the matching entries to display and the retrieval condition, the navigation string, to parse for extracting protocol, host name, port, path and search string for keywords and categories to store in the navigation and search databases is equivalent to Applicant's storing the variables in a corresponding table with corresponding search request identifiers);

"combining the requests into a combined retrieval pattern including the search variables of the requests" (See Figs. 4a-4b and Page 5, [0053]-[0058] wherein Biderman's the navigation string and keywords are combined for the search and retrieval is equivalent to Applicant's combining the requests into a combined retrieval pattern including the search variables of the requests); and

"performing search using the combined retrieval pattern" (See Figs. 5-6 and Page 5, [0062] wherein Biderman's a search is performed based on the retrieved navigation strings and keywords is equivalent to Applicant's performing search using the combined retrieval pattern).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a

person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 25-46 are rejected are rejected under U.S.C. 103(a) as being unpatentable over Biderman et al. (U.S. Publication 2001/0037325, hereafter "Biderman") in view of Hasegawa et al. (U.S. Patent 6,513,038, hereafter "Hasegawa") and Cusson et al. (U.S. Patent 6,487,641, hereafter "Cusson").

As per claims 25, 30, 35, 41 and 46, Biderman teaches "receiving, from a terminal apparatus, a search condition set that comprises a search-pattern" and "is used when searching through data constituting a search target, together with a terminal apparatus identifier that identifies the terminal apparatus associated with a search condition set" (See Page 5, [0053]-[0058] wherein Biderman's database servers receive web navigation request, a retrieval condition, from web surfers in the forms of URLs and keywords which are transmitted from the client machines to the servers via the web server and the client machine information is retrieved by the servers for returning the matching entries to the client to display is equivalent to Applicant's receiving, from a terminal apparatus, a search condition set that comprises a search-pattern and is used when searching through data constituting a search target, together with a terminal apparatus identifier that identifies the terminal apparatus associated with a search condition set).

Biderman does not specifically teach receiving a search condition set that comprises a search-formula for searching the target.

However, Hasegawa teaches receiving a search condition set that comprises a search-formula at Fig. 2 and col. 10, lines 55-66 wherein a view definition syntax is inputted as a search string consisting of definition syntax identifier, directory name view name, set operation name and set operation condition wherein the search entry set operation condition and the view definition syntax are search-formulas.

It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention was made to combine Hasegawa's reference with Biderman's teaching by constructing search formula to input query syntax because both references are directed toward data access management, and the combined reference would have enabled the search system to effectively group the search entries and integrate the search result, independent of applications, to achieve an easy and flexible access to data.

Biderman teaches "storing search condition sets and terminal apparatus identifiers received from one or more of the terminal apparatuses" (See Page 5, [0057]-[0058] wherein Biderman's client machine information is retrieved for returning the matching entries to display, and the retrieval condition and the navigation string are parsed for extracting protocol, host name, port, path, and search string for keywords and categories are extracted to store in the navigation and search databases is equivalent to Applicant's storing search condition sets and terminal apparatus identifiers received from one or more of the terminal apparatuses into a search-condition buffer).

Hasegawa and Biderman do not specifically teach storing the retrieval condition into "a search-condition buffer", although storage is utilized for storing search condition as depicted in Fig. 2, element 3.

However, Cusson teaches queryable cache and cached data (See Fig. 2 and col. 5, lines 48-52 wherein Cusson's storing query in the queryable cache is equivalent to Applicant's storing the retrieval condition in a search-condition buffer).

It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention was made to further combine Cusson's reference with Hasegawa and Biderman's already combined teaching by implementing cache as an extended storage device and as a logic determining tool such that the cache could have kept information for answering frequently made queries and returning result more quickly by avoiding the overhead of the hops of the data access such that the performance of Biderman's system would have been further improved for serving a plurality of web surfers.

Biderman further teaches the following:

"when investigating and determining that no preceding search-process is in progress and that two or more search-patterns are same as each other among those stored in the search-condition buffer" (See Page 5, [0058] wherein Biderman's the navigation and search databases server determines if the URL in the navigation string ever visited and keywords ever searched previously, and the new search keywords are added to the search database is equivalent to Applicant's when investigating and determining that no

preceding search-process is in progress and that two or more search-patterns are same as each other among those stored in the search-condition buffer); and
“leaving a first of the same search-patterns in the search-condition buffer and erases second and further ones being same to the first one” (See Page 5, [0058] wherein Biderman’s the navigation and search databases server determines if the URL in the navigation string ever visited and keywords ever searched previously, and the new search keywords are added to the search database is equivalent to Applicant’s leaving a first of the same search-patterns in the search-condition buffer and erases second and further ones being same to the first one).

Hasegawa further teaches “generating a search-pattern-variable table containing and correlating the search-pattern and a first variable that makes the search-pattern an associated value” (See Figs. 2-3 and col. 10, line 55 – col. 12, line 17 wherein Hasegawa’s user entries of view definition syntax, consisting of view name, directory name view name, set operation name and set operation condition, and view search instruction translation rule are generated and saved to the databases is equivalent to Applicant’s generating a search-pattern-variable table containing and correlating the search-pattern and a first variable that makes the search-pattern an associated value);
“further generating a search-query-formula-variable table containing and correlating, in a manner based on search-formulas and the terminal apparatus identifiers stored in the search-condition buffer and the generated search-pattern-variable table, a first search-query formula describing the search-pattern in a form using the first variable” (See Figs. 2-4 and col. 10, line 55 – col. 12, line 40 wherein Hasegawa’s user entries of view

definition syntax, consisting of view name, directory name view name, set operation name and set operation condition, and view search instruction translation rule are generated and saved to the databases is equivalent to further generating a search-query-formula-variable table containing and correlating, in a manner based on search-formulas and the terminal apparatus identifiers stored in the search-condition buffer and the generated search-pattern-variable table, a first search-query formula describing the search-pattern in a form using the first variable).

The combined teaching of Biderman and Hasegawa references further teaches “a second variable that makes the first search-query formula the associated value and further correlating the terminal apparatus identifier with a second search-query-formula describing the first search-query-formula in a form using the second variable and the second variable that makes the first search-query-formula the associated value, and searching through a search-target database containing said data of the search-target according to the search-query-formula-variable table for extracting a data set that matches with the search condition set received from any of the plurality of terminal apparatuses as a search result” (See Hasegawa: Figs. 2-4 and col. 10, line 55 – col. 12, line 40 wherein Hasegawa’s user entries of view definition syntax, the first search-query-formula, consisting of variables, including view name, directory name view name, set operation name, are the first, second variables the associated value and further correlating the terminal apparatus identifier to combined with host information retrieval taught by Biderman as previously described to correlate with set operation condition, the second search-query-formula to describe the first search-query-formula is

equivalent to Applicant's a second variable that makes the first search-query formula the associated value and further correlating the terminal apparatus identifier with a second search-query-formula describing the first search-query-formula in a form using the second variable and the second variable that makes the first search-query-formula the associated value, and searching through a search-target database containing said data of the search-target according to the search-query-formula-variable table for extracting a data set that matches with the search condition set received from any of the plurality of terminal apparatuses as a search result).

Hasegawa further teaches "transmitting the search result back to a relevant terminal apparatus" (See Figs. 2-4 and col. 10, line 55 – col. 12, line 40 wherein Hasegawa's view search result is outputted and displayed to user's system is equivalent to Applicant's transmitting the search result back to a relevant terminal apparatus).

As per claims 26, 31, 36 and 42, Cusson further teaches "search condition buffer stores the search condition until it is determined that a retrieving process is completed" (See Fig. 2, col. 3, lines 49-50 and col. 5, lines 48-52 wherein Cusson's storing query in the queryable cache and refreshing missing pages in the cache by using least recently used status is equivalent to Applicant's search condition buffer stores the search condition until it is determined that a retrieving process is completed).

As per claims 27, 32, 37 and 43, Cusson further teaches "search condition buffer stores the search condition until a predetermined time is reached or a predetermined

capacity is filled” (See Fig. 2, col. 5, lines 48-52 and col. 3, lines 37-50 wherein Cusson’s storing query in the queryable cache by using LRU algorithm to determine which data to be replaced when new data is to be cached is equivalent to Applicant’s search condition buffer stores the search condition until a predetermined time is reached or a predetermined capacity is filled).

As per claims 28, 33, 37 and 44, Cusson further teaches “wherein retrieval performed by the retrieval apparatus includes simultaneously retrieving a plurality of retrieval patterns” (See Fig. 2, elements 203’s and col. 5, line 25 – col. 8, line 5 wherein Cusson’s a plurality of users utilize the cached query results without invoking database query should the result pages are on the cache is equivalent to Applicant’s wherein retrieval performed by the retrieval apparatus includes simultaneously retrieving a plurality of retrieval patterns).

8. Claims 29, 34, 39 and 45 are rejected are rejected under U.S.C. 103(a) as being unpatentable over Biderman et al. (U.S. Publication 2001/0037325, hereafter “Biderman”) in view of Hasegawa et al. (U.S. Patent 6,513,038, hereafter “Hasegawa”) and Cusson et al. (U.S. Patent 6,487,641, hereafter “Cusson”), as applied to claims 23-28, 30-33, 35-38 and 41-44, and further in view of Sundaresan (U.S. Patent 6,487,566).

As per claims 29, 34, 39 and 45, the combined Cusson-Hasegawa-Biderman reference teaches pattern retrieval from a plurality of users on a network environment as previously described in claims 25, 30, 35, 41 and 46 rejection.

The combined reference does not specifically teach "wherein retrieval performed by the retrieval apparatus is performed in one of an Aho-corasick (AC) method, an Expanded-Boyer-Moore (EBM) method, and a Shinohara-Arikawa (SA) method".

However, Sundaresan teaches pattern matching logic by using Aho-Corasick method as illustrated in Fig. 3, steps 300-322 where XML file is received, transformed and generated.

It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention was made to further combine Sundaresan's teaching with the already combined Cusson-Hasegawa-Biderman reference by implementing the Aho-Corasick method for transforming pattern matched XML document from one XML form to another because by doing so pattern matching and automatic, dynamic document transformation could have been performed at the same time since XML is such a common language and the dynamic transformation would have further improved the performance of the cache queryable and cached database system implemented from the combined Cusson-Biderman reference.

9. Claim 40 is rejected are rejected under U.S.C. 103(a) as being unpatentable over Hasegawa et al. (U.S. Patent 6,513,038, hereafter "Hasegawa") in view of Biderman et al. (U.S. Publication 2001/0037325, hereafter "Biderman") and Cusson et al. (U.S. Patent 6,487,641, hereafter "Cusson").

As per claim 40, Hasegawa teaches the following:

"a terminal device side transmission unit transmitting a search condition containing a search pattern for data to be searched and a search formula together with terminal device information for designating each terminal device" (See Figs. 2 and 30, and col. 10, lines 55-66 and col. 24, lines 20-26 wherein Hasegawa's directory access apparatus, the terminal device, a view definition syntax is inputted as a search string consisting of definition syntax identifier, directory name view name, set operation name and set operation condition wherein both the search entry set operation condition and the view definition syntax are search-formula(s) is equivalent to Applicant's a terminal device side transmission unit transmitting a search condition containing a search pattern for data to be searched and a search formula together with terminal device information for designating each terminal device);

"said pattern retrieval system comprises: a retrieval target data storage unit storing data to be searched" (See Fig. 1, elements 3, 6, 21 and 16 wherein Hasegawa's directory access apparatus is equipped with storage units for input search string, formula, translation rule and searched view directory result is equivalent to Applicant's a retrieval target data storage unit storing data to be searched);

"a retrieval condition reception unit receiving a retrieval condition, transmitted from each terminal device side transmission unit of said plurality of terminal devices", "including a retrieval pattern and a retrieval expression for retrieval of the data to be searched" (See Figs. 2-4, and 30, steps S10, S20, S30, elements 10 and 100 wherein Hasegawa's directory access apparatus is equipped with input reception unit for receiving retrieval condition is equivalent to Applicant's a retrieval condition reception unit receiving a

retrieval condition, transmitted from each terminal device side transmission unit of said plurality of terminal devices, including a retrieval pattern and a retrieval expression for retrieval of the data to be searched).

Hasegawa does not specifically teach the terminal device information for designation of each of the terminal devices is transmitted together with search string and search formula.

However, Biderman teaches "the terminal device information for designation of each of the terminal devices is transmitted" (See Page 5, [0057]-[0058] wherein Biderman's client machine information is retrieved for returning the matching entries to display and the retrieval condition, the navigation string, to parse for extracting protocol, host name, port, path and search string for keywords and categories to store in the navigation and search databases is equivalent to Applicant's the terminal device information for designation of each of the terminal devices is transmitted).

It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention was made to combine Biderman's reference with Hasegawa's teaching by constructing search formula to input query syntax because both references are directed toward data access management, and the combined reference would have enabled the search system to effectively group the search entries and integrate the search result, independent of applications, to achieve an easy and flexible access to data.

Hasegawa and Biderman do not specifically teach storing the retrieval condition into "a retrieval condition buffer unit storing the retrieval condition and the terminal device

information received by said retrieval condition reception unit", although the combined reference teaches receiving host information, and search condition and formula, and storing into storage as previously described.

However, Cusson teaches queryable cache and cached data (See Fig. 2 and col. 5, lines 48-52 wherein Cusson's storing query in the queryable cache is equivalent to Applicant's a retrieval condition buffer unit storing the retrieval condition and the terminal device information received by said retrieval condition reception unit).

It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention was made to further combine Cusson's reference with Biderman and Hasegawa's already combined teaching by implementing cache as an extended storage device and as a logic determining tool such that the cache could have kept information for answering frequently made queries and returning result more quickly by avoiding the overhead of the hops of the data access such that the performance of Biderman's system would have been further improved for serving a plurality of web surfers.

Biderman further teaches the following:

"a retrieving process determination unit determining whether or not a preceding retrieving process is being performed" (See Page 5, [0058] wherein Biderman's the navigation and search databases server determines if the URL in the navigation string ever visited and keywords ever searched previously, and the new search keywords are added to the search database is equivalent to Applicant's a retrieving process

determination unit determining whether or not a preceding retrieving process is being performed); and

“a retrieval pattern variable table generation unit generating, when the retrieving process determination unit determines that the preceding retrieving process is not being performed, a retrieval pattern variable table in which a retrieval pattern and a first variable having the retrieval pattern as a value are associated with each other, if there are two or more identical retrieval patterns in the retrieval patterns stored in said retrieval condition buffer units, excluding the retrieval patterns other than one retrieval pattern” (See Page 5, [0058] wherein Biderman's the navigation and search databases server determines if the URL in the navigation string ever visited and keywords ever searched previously, and the new search keywords are added to the search database is equivalent to Applicant's a retrieval pattern variable table generation unit generating, when the retrieving process determination unit determines that the preceding retrieving process is not being performed, a retrieval pattern variable table in which a retrieval pattern and a first variable having the retrieval pattern as a value are associated with each other, if there are two or more identical retrieval patterns in the retrieval patterns stored in said retrieval condition buffer units, excluding the retrieval patterns other than one retrieval pattern).

The combined teaching of Biderman and Hasegawa references teaches “a retrieval request expression variable table generation unit generating a retrieval request expression variable table in which the retrieval request expression indicating the retrieval pattern using the first variable and the second variable having the retrieval

request expression as a value are associated, and the retrieval request expression indicating the terminal device information and the retrieval expression using the second variable and the second variable having the retrieval request expression as a value are associated based on the retrieval expression and the terminal device information stored in said retrieval condition buffer unit, and the retrieval pattern variable table generated by said retrieval pattern variable table generation unit" (See Hasegawa: Fig. 2, wherein view name, directory name view name and set operation name are the 1st, 2nd and 3rd variables and set operation condition is the expression to formulate the retrieval condition, and Biderman: Page 5, [0057]-[0058] wherein Biderman's client machine information is retrieved for returning the matching entries to display is equivalent to Applicant's a retrieval request expression variable table generation unit generating a retrieval request expression variable table in which the retrieval request expression indicating the retrieval pattern using the first variable and the second variable having the retrieval request expression as a value are associated, and the retrieval request expression indicating the terminal device information and the retrieval expression using the second variable and the second variable having the retrieval request expression as a value are associated based on the retrieval expression and the terminal device information stored in said retrieval condition buffer unit, and the retrieval pattern variable table generated by said retrieval pattern variable table generation unit).

Hasegawa further teaches the following:

"a retrieval unit extracting a retrieval result matching the retrieval condition transmitted from each of the plurality of terminal devices by searching said retrieval target data

storage unit according to the retrieval request expression variable table generated by said retrieval request expression variable table generation unit” (See Fig. 30, element 100 wherein the directory access apparatus retrieves directory view information from content directory is equivalent to Applicant’s a retrieval unit extracting a retrieval result matching the retrieval condition transmitted from each of the plurality of terminal devices by searching said retrieval target data storage unit according to the retrieval request expression variable table generated by said retrieval request expression variable table generation unit”;

“a transmission unit transmitting the retrieval result extracted by said retrieval unit to each of the plurality of terminal devices” (See Fig. 30, element 100 wherein the directory access apparatus retrieves directory view information from content directory is equivalent to Applicant’s a transmission unit transmitting the retrieval result extracted by said retrieval unit to each of the plurality of terminal devices); and

“each of said plurality of terminal devices further comprises a terminal device side reception unit receiving the result transmitted by said transmission unit” (See Fig. 30, element 100 wherein the directory access apparatus retrieves directory view information from content directory is equivalent to Applicant’s each of said plurality of terminal devices further comprises a terminal device side reception unit receiving the result transmitted by said transmission unit).

Response to Arguments

10. a). At Page 11, concerning independent claims 25, 30, 35, 40, 41 and 46, the Applicant argued that the references do not teach search formula.

As to the above argument, the Examiner has introduced a new Hasegawa reference to provide the teaching of the new subject matter, as previously described in the Action.

b). At Page 12, concerning independent claims 25, 30, 35, 40, 41 and 46, the Applicant argued that the Biderman does not teach specific details of keyword search and Cuson reference is not directed to searching of keywords.

As to the above argument b), the Examiner respectfully submits that the Biderman reference teaches keyword searching sending URL and keyword to the database server to conduct the search, please see Page 5, [0053]-[0058]. As to Cuson reference, it is mainly cited for providing teaching of buffer for caching data and storing cached data.

c). At Page 13, concerning independent claims 23-24, the Applicant further argued that Biderman reference does not teach combining search string from client and the list of search engines.

As to the above argument b), the Examiner respectfully submits that the Biderman reference teaches combining search string from client and server. Also respectfully disagreed is the "from list of search engines" wherein the Examiner would believed not included in the claim language.

As a result, the Examiner believed, in the Action, the claim limitations were broadly and reasonably interpreted and the corresponding sections of the references were properly cited.

11. Regarding claims 26-29, 31-34, 36-39 and 42-45, the claims are dependent on claims 25, 30, 35 and 41, respectively. The Examiner applied the stated arguments as previously described in the Office Action for the Final Rejections.

12. In light of the foregoing arguments, the 35 U.S.C. 102 rejection of Claims 23-24 and 35 U.S.C. 103 rejection of Claims 25-46 is hereby sustained.

13. The prior art made of record

A. U.S. Publication 2001/0037325

B. U.S. Patent No. 6,487,641

C. U.S. Patent No. 6,487,566

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

D. U.S. Patent No. 6,029,165

E. U.S. Patent No. 6,385,605

F. U.S. Patent No. 6,526,400

G. U.S. Patent No. 6,584,465

H. U.S. Patent No. 6,493,705

I. U.S. Patent No. 6,094,647

J. U.S. Patent No. 6,513,038

Conclusions

14. Applicant's amendment necessitated the new grounds of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact Information


15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mohammad Ali whose telephone number is (571) 272-4105. The examiner can normally be reached on Monday-Thursday (7:30 am-6:00 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E Breene can be reached on (571) 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.


Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kuen S. Lu

Patent Examiner

May 8, 2005


Ali Mohammad
Primary Examiner

May 8, 2005